

**Remarks/Arguments:**

Reconsideration and allowance of the above-identified application is respectfully requested. This amendment adds no new claims, and is provided to amend the specification and claims 1, 9 and 13-16. No new matter has been added. Upon entry of this amendment, claims 1-16 will be pending. For simplicity, all citations to the specification will refer to the paragraph numbers used in the application's Patent Application Publication, U.S. 2004/0160360A1.

**Specification**

The Applicants have amended paragraph 61 to correct a typographical error. Specifically, as shown in Fig. 4 and at paragraphs 106-107, the "satellite acquisition information calculator 350" calculates Doppler shift information using pseudo velocity information received from the pseudo velocity calculator 340 (see connections of Fig. 4), and transmits the calculated Doppler shift information to the MS 100 (see connections of Fig. 4, see also step 925 of Fig. 9 and paragraph 107).

**Rejections of the Claims under 35 U.S.C. 112**

The Examiner has rejected claims 1-16 under 35 U.S.C. 112, as failing to comply with the enablement requirement. Specifically, the Examiner states that the determination of pseudo velocity using *only* a velocity component directed to the MS and calculating a Doppler shift has not been described in the specification in such a way as to enable one skilled in the art to make and/or use the invention.

However, in view of the additional amendments to claims 1 and 9, the Applicants have amended claims 1 and 9 to delete the recitation of an exemplary embodiment of the present invention wherein the pseudo velocity is determined using only a velocity component directed to the MS. Accordingly, the Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 112 of claims 1-16.

Rejections of the Claims under 35 U.S.C. 102(b)

The Examiner has rejected claims 1-16 under 35 U.S.C. 102(b), as being anticipated by U.S. Patent No. 6,487,499 of Fuchs et al. (hereinafter referred to as Fuchs) as supported by U.S. Patent No. 4,405,986 of Gray (hereinafter referred to as Gray). Specifically, the Examiner points to Fuchs as disclosing a satellite data collector, a satellite velocity calculator, a pseudo velocity calculator, and a satellite acquisition information calculator, purportedly anticipating the subject matter claimed by the Applicants in claim 1, and a control method thereof claimed in claim 9.

However, the Applicants have further amended claims 1 and 9 to recite additional exemplary features of an embodiment of the present invention, which comprise an interface for receiving request messages from the MS, a satellite position calculator for receiving the request, as does the satellite velocity calculator, and calculating satellite position information, and a pseudo range calculator for calculating a pseudo range using the calculated satellite position information. This is not new matter, and is described elsewhere in the specification (see paragraphs 57-61, and Fig. 4).

The amendments to claims 1 and 9 clarify that the receipt of a request from the MS generates a reply comprising a code phase and Doppler shift based upon a pseudo range using the calculated satellite position information from the satellite position calculator, and using pseudo velocities between the MS and each satellite observed by the MS at a position measurement time of the MS. An initialization packet, as described by the Fuchs reference, is not provided. That is, an initialization packet as described by the Fuchs reference comprising a pseudo-range model, is not provided to the MS in response to the request for location in Applicants claims 1 and 9 as amended.

In contrast, the Fuchs reference describes a system and method in which a location request comprising a rough estimate of MS position is received at the position server, and the position server communicates an initialization packet to the MS (see col. 6, lines 34-40, 50-52). The Fuchs reference describes a system that uses

GPS measurements obtained at a reduced number of fixed site GPS receivers to create a wide area model of the GPS constellation. The model is then used by the position server to send initialization information to the MS, which further collects certain GPS signal information and transmits the information back to the position server which can then calculate the MS position (see col. 5, lines 17-30).

Contrasts between the Applicants claimed response to the MS and the Fuchs initialization packet are illustrated by the determination of the pseudo-range model used by Fuchs to generate the initialization packet, which provides which code phase to expect from each satellite, and a rate of change of pseudo-range (rate of change of code and carrier phase) (see col. 7, lines 46-50). The Applicants assert that the satellite acquisition information calculator as claimed by the Applicants in claims 1 and 9 as amended, in contrast, provide a code phase and Doppler shift to the MS in response to the request for location which does not require a rough estimate position of the MS in the request message received from the MS. That is, the Fuchs reference describes the determination of the pseudo-range model (and initialization packet) using a rough estimate position of the MS in the request message received from the MS (see col. 6, lines 50-52).

Accordingly, the Applicants assert that the request message claimed by the Applicants in claims 1 and 9 and amended, is not disclosed or reasonably suggested by the request message of the Fuchs reference. Specifically, Applicants' request message does not include rough estimate positions of the MS.

Further, the initialization packet of Fuchs is described as based in part, on the rough estimate information provided by the MS. This information is not provided nor required by Applicants satellite acquisition information calculator. Accordingly, the Applicants assert that the code phase and Doppler shift reply, based on a pseudo range using the calculated satellite position information from the satellite position calculator, and pseudo velocities from the pseudo velocity calculator claimed by the Applicants in claims 1 and 9 as amended, is not disclosed or reasonably suggested by

the initialization packet of the Fuchs reference which relies upon rough position estimates provided in the request message from the MS.

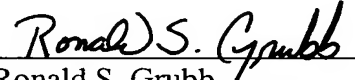
The Applicants assert that the Fuchs reference does not teach or reasonably suggest each element of independent claims 1 and 9 as amended, from which claims 2-8 and 10-16, depend. Accordingly, the Applicants respectfully request the withdrawal of the rejection under 35 U.S.C. 102(b) of independent claims 1 and 9, and respectfully request the withdrawal of the rejection under 35 U.S.C. 102(b) of dependent claims 2-8 and 10-16, which are dependent from claims 1 and 9, for the same reasons.

Regarding claims 2-4, 6-8 10-12 and 14-16, the Applicants assert that the Fuchs reference does not teach or reasonably suggest each element of independent claims 1 and 9 as amended, from which claims 2-4, 6-8 10-12 and 14-16, depend. Accordingly, the Applicant respectfully requests the withdrawal of the rejection under 35 U.S.C. 102(b) of dependent claims 2-4, 6-8 10-12 and 14-16, for the same reasons.

#### Conclusion

In view of the above, it is believed that the application is in condition for allowance and notice to this effect is respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

  
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